Limited Scope Project Delivery Guideline

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Limited Scope Project Delivery Approach

Overview

In order to effectively administer the planning and design of transportation-related problems with a limited scope, the NJDOT has developed a Limited Scope Project Delivery Approach. The Limited Scope project types and parameters are referenced within this section.

The main difference between the Limited Scope Project Delivery Approach and the standard Capital Project Delivery (CPD) process is that the Limited Scope Project Delivery Approach does not have a formal PE Phase. The applicable CPD process PE activities and corresponding Work Breakdown Structure (WBS) deliverables have been distributed to the Limited Scope CD and Limited Scope FD Phases. The two key former Limited Scope PE deliverables were distributed as follows: Approved Environmental Document is in the Limited Scope CD Phase and approved Design Exception Report (if needed) is in the Limited Scope FD Phase.

Eliminating the formal PE Phase for this approach is possible because the project scope should not change once the Preliminary Preferred Alternative (PPA) is selected at the end of Limited Scope CD Phase. By eliminating the formal Limited Scope PE Phase, the Department can realize significant savings in administrative costs and time.

Limited Scope Project Delivery Approach History

The NJDOT introduced the Limited Scope Project Delivery Approach for two types of projects that met approved criteria:

- pavement resurfacing ("mill 'x', pave 'x' plus one")
- bridge deck/superstructure replacement

Templates were developed for each of these project types to assist in performing CD and FD activities and are listed on the Limited Scope Project Delivery Approach webpage. These tools were developed to facilitate and expedite the delivery process for Limited Scope projects. Although customization of these tools is possible in certain cases, advance FHWA concurrence is needed for any customization of these templates before commencing CD or FD.

It is important to understand that the Limited Scope Project Delivery Approach enables an expedited process to be used if warranted project scope produces only limited project impacts. The warranted project scope includes those scope items identified in CD necessary to address the problem statement and any necessary safety and/or other deficiencies required to be addressed based upon the project type.

In order to maintain the integrity of the Limited Scope Project Delivery Approach, the CD Phase should consist of an objective assessment of the warranted scope and related impacts to determine if the project meets the requirement of Limited Scope. Checklists should be completely filled in and comments should clarify/confirm the scope to be included. Open ended comments should be avoided. If ultimately, the CD assessment indicates that a project's scope does not meet Limited Scope requirements, the project needs to be delivered utilizing the standard CPD Process.

The NJDOT, with concurrence from FHWA, subsequently expanded the Limited Scope Project Delivery Approach to provide for a faster, more efficient way to deliver small-scope projects that may come from other NJDOT Management Systems (e.g., Drainage Management System, Safety Management System). Limited Scope eligibility for these additional project types is premised on the requirement that existing footprints are maintained, Certified CE documentation is applicable with only minor permits, no or minimal utilities and/or no permanent right of way acquisition, except for ADA compliancy.

The additional project types include:

- Drainage Improvement
- Simple Culvert Structural Repair
- Median Crossover Improvement
- Sign Structure Installation *
- ITS Installation
- Simple Intersection Improvement (no reduction in lane or shoulder width, minimal utility/right of way involvement)
- Thin Surface Treatment
- High Friction Surface Treatment
- Concrete Pavement Repair
- Additional project types as necessary upon approval by FHWA
 - * Design exception approval of substandard minimum vertical clearance is required.

Note: Full Depth Reconstruction projects shall utilize the standard CPD Process.

Features of pavement resurfacing projects that have been approved for Limited Scope projects may include:

- Cross-slope Improvement
- Shoulder Reconstruction (not to exceed 10% of the total payement area for concrete and HMA) **
- Full Depth Pavement Repair (not to exceed 10% of the total pavement area for concrete and HMA) **
- Full Depth Reclamation (not to exceed 10% of the total pavement area for concrete and HMA) **
- Cold and Hot In-Place Recycling
- Additional features as necessary upon approval by FHWA

** If projects have Full Depth Pavement Repair or Full Depth Reclamation that exceeds 10% of the total pavement area, a pavement life cycle cost analysis shall be conducted and approved by FHWA for the project to be considered Limited Scope. If the pavement life cycle cost analysis is approved by FHWA, CSDE evaluation and design exception approval is not required. If the pavement life cycle cost analysis is not approved by FHWA, the project shall proceed as a reconstruction project and utilize the standard CPD process.

Pavement Resurfacing and Bridge Deck/Superstructure Replacement Projects

The purpose of pavement resurfacing and bridge deck/superstructure replacement projects is to address the identified deficiencies in order to extend the functional and structural life of the assets. The project scope is not intended to go beyond addressing the defined purpose and need. Pavement resurfacing and bridge deck/superstructure replacement projects that involve acquisition of right of way or easements, environmental impacts or permanent utility relocations are generally not applicable to the Limited Scope Project Delivery Approach and should typically be designed using the standard CPD process. These impacts need to be identified in CD and properly noted in the applicable Checklist.

The following are the general concepts for both the pavement resurfacing and bridge deck/superstructure replacement projects:

 Pavement resurfacing and bridge deck/superstructure replacement projects are typically identified using the NJDOT Pavement Management System and the NJDOT Bridge Management System, but can be generated from individual problem statements.

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- Due to limited seasonal availability to conduct aerial survey, mapping for Limited Scope projects may be acquired under a separate task order in the CD Phase (instead of acquired at the beginning of FD) and provided to the Designer upon availability.
- Pavement resurfacing and bridge deck/superstructure replacement projects should not involve ITS
 impacts, access impacts, or the acquisition of right of way. Temporary easements may be considered on
 a project-by-project basis to accommodate construction activities.
- Utility involvement for pavement resurfacing and bridge deck/superstructure replacement projects is generally limited to manhole, valve, and inlet resets. Temporary utility relocations may be considered on a project-by-project basis to accommodate construction activities.
- Guiderail should be evaluated and upgraded to current standard, wherever feasible.
- ADA compliance is required.
- Pavement resurfacing and Bridge deck replacement projects only require a Self-Certified CE Document.
- Superstructure replacement projects require a CE Document.
- Selected network activities can be added or removed on Limited Scope Projects on a project-by-project basis.

The following are the general concepts for pavement resurfacing projects:

- Guiderail should be evaluated and upgraded to current standard, wherever feasible
 - O A pavement resurfacing that overlays a bridge deck is generally treated as a preventive maintenance scope and therefore, if the work is to be federally eligible for participation, justification should be provided supporting that the preventive maintenance recommendation is part of a systematic approach and that application of the overlay will extend the useful life of the bridge and bridge deck until currently programmed improvements are implemented. Otherwise, a 10 year service life needs to be achieved. As an alternative, the bridge portion could be included using other funding.
- A pavement resurfacing "mill 'x', pave 'x' plus one" project has the ability to perform Full Depth Concrete Joint Repair.

The following are the general concepts for bridge deck/superstructure replacement projects:

- Bridge deck/superstructure replacement projects require a Design Exception Report if controlling substandard design elements are present on the structure.
- Superstructure replacement projects requiring environmental documents other than a Categorical Exclusion Document cannot use the Limited Scope Project Delivery Approach.
- A bridge deck/superstructure replacement project has the ability to overlay a bridge deck with more than 1" of pavement to accommodate Bridge Deck Waterproof Surface Course overlays.

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Typical Pavement Resurfacing and Bridge Deck/Superstructure Replacement Projects Tasks by Delivery Phase

Problem Screening

- Identified roadway and bridge deck/superstructure problems are screened.
- The NJDOT Management System owner reviews the problem to determine if the Limited Scope project delivery approach is appropriate.
- The Pavement Management System owner develops a pavement recommendation.
- Capital Program Management receives approval from the CPC to advance the project to CD using the Limited Scope project delivery approach based on project parameters and the pavement recommendation.

Concept Development

- The Project Manager utilizes the Limited Scope CD Network Diagram and CD Activity Descriptions to prepare the Limited Scope CD Scope Statement.
 - The Limited Scope CD Network Diagram has been customized to eliminate activities that are typically not applicable to address the purpose and need of the proposed project, while keeping the activities needed to adequately select the best solution for the problem.
 - The CD Activity Descriptions include additional guidance to perform a Limited Scope CD study, including modified scope and schedule suggestions.
 - o If environmental products or deliverables, other than a Self-Certified CE Document or CE Document (e.g., Section 4(f), Section 106) are needed in a Limited Scope project, the applicable activities may be added through coordination with FHWA.
 - Selected network activities can be added or removed on a project-by-project basis.
- The Designer and Project Manager utilize the Limited Scope CD Pavement or Bridge Checklist to:
 - o Determine the full impacts associated with the identified problem
 - o Collect and document data and verify the impacts with internal/external SMEs
 - Verify that the problem's solution can be determined and produced using the Limited Scope Project Delivery Approach.
- The checklist will be used as a tool during the field visit and later to document additional information.
 If through the field visit and subsequent information it is determined that the scope of the solution is beyond the Limited Scope Project criteria, the Limited Scope Study is terminated. In order to proceed, the proposed project is returned to the Capital Program Committee to advance under the standard CPD process.
 - If issues identified during the field visit require further discussion, the Project Manager holds a Scope Team Meeting to resolve outstanding issues.
- A Limited Scope CD Report will only address the activities in the project-specific Limited Scope Project primavera schedule template.
- During the preparation of the Limited Scope CD Report, the Project Manager utilizes the Limited Scope FD Network Diagram and Limited Scope FD Activity Descriptions to prepare the Limited Scope FD Scope Statement.

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Final Design

- The FD Activity Descriptions include additional guidance to perform a Limited Scope FD project, including modified scope and schedule suggestions.
- The Limited Scope FD Network Diagram has been customized to eliminate activities that are typically not needed in support of "mill 'x' pave 'x' plus one" or bridge deck/superstructure replacement projects. On a project-by-project basis, previously removed standard template activities may be added through coordination with FHWA. However, this should be done prior to beginning the FD Phase.
- If a utility relocation is needed in a Limited Scope project, the Department's utility process needs to be followed whether utility relocations are permanent or temporary.
- At the beginning of FD, survey work is performed, base maps are produced, and horizontal and vertical geometry is prepared.
- If controlling substandard design elements are present on the structure, a design exception report is prepared for approval.

Checklist and CD Report Requirements

The following table provides information on what is required for FHWA approval when advancing to Final Design.

Project Type	Checklist	CD Report	Other Requirements
	Required?	Required?	
Pavement resurfacing	Yes	Yes	
Bridge deck/superstructure	Yes	Yes	
replacement			
Drainage Improvements	Yes	Yes	
Simple Culvert Structural Repair	Yes	Yes	
Median Crossover Improvement	Yes	Yes	
Sign Structure Installation	Yes	No	Include a Summary Document if there
			are multiple sites
ITS Installation	No	No	A Systems Engineering Review Form
			(SERF) is required, and if applicable,
			a Concept of Operations Report.
Simple Intersection Improvement	Yes	Yes	
Thin Surface Treatment	Yes	No	Include Pavement Recommendation if
			available.
Concrete Pavement Repair	Yes	No	Include Pavement Recommendation if
			available.

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Addressing ADA Compliance on Limited Scope Projects

Americans with Disabilities Act (ADA) compliance is required on limited scope projects. Achieving this compliance may involve relocating utilities and acquiring right-of-way (ROW). Often, the timeframe to acquire ROW will exceed the time needed to complete the project design; thus significantly impacting the project schedule and subjecting the pavement to further deterioration.

To address this issue, an "ADA with ROW Sequencing Procedure" has been developed to effectively deliver limited scope projects and address ADA compliance with ROW Impacts. The procedure is comprised of four major steps: Evaluation and Identification, ROW Impact Assessment, Alternatives Analysis, and ADA Documentation.

ADA with ROW Sequencing Procedure

Evaluation and Identification

The designer evaluates the project for ADA compliance. The designer identifies the existing and proposed curb ramps that will have ROW impacts due to ADA compliance and provides the Project Manager with a list of these curb ramp locations.

Note: Sufficient base mapping information and applicable design work needs to be completed in order to determine the ROW impact for ADA compliance.

ROW Impact Assessment

The Project Manager requests that ROW assess each ADA location to determine the applicable ROW process to be used (right of entry, easement, acquisition, etc.) and associated ROW impact time frame. Based upon the ROW impact time frames, the Project Manager determines if the location-specific ROW process time frame (Right of Entry, easement, acquisition, etc.) will delay the project schedule to the degree that the roadway pavement will deteriorate and the cost of repairs will increase. For each ADA compliance location where this is the case, the Project Manager will breakout these curb ramps into an alternative delivery method which is separate from the original project.

Alternatives Analysis

The Project Manager identifies the most suitable method to construct the breakout curb ramps. First, the Project Manager should determine if these breakout curb ramps can be incorporated into a nearby project currently in the project delivery process. If that's not feasible, then one of the following alternatives should be considered:

- o Advance the curb ramp designs to the Bureau of Maintenance for construction
- Create a stand-alone project to construct curb ramps
- o If ROW acquisition is completed during construction of the original project, incorporate the construction of curb ramps via a Change of Plan.

Note: For ROW work that will remain in the original contract, the NEPA document will need to address associated ROW impacts.

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ADA Documentation

If any ADA compliance work is broken out from the original project, the Project Manager completes the <u>Technically Infeasible Form</u>. In addition, a STIP modification needs to be in place, prior to moving forward with the breakout project, in order to obligate the Department to construct the breakout project.

The Project Manager also determines a projected date when the breakout curb ramps will be constructed and submits it to the Department's ADA Coordinator for incorporation into the ADA Compliance Transition Plan. When the breakout curb ramps are constructed, the Project Manager notifies Department's ADA Coordinator and the Coordinator removes the curb ramps from the Transition Plan.

A graphic representation of the ADA with ROW Sequencing Procedure, including critical decision points, can be viewed in the <u>Limited Scope ADA with ROW Impacts Process Workflow</u>.

ADA with ROW Impacts Schedule Guidance

Additional activities associated with environmental impacts, permits, and access may need to be included in project-specific schedules and budgets based upon project-specific ADA designs and impacts.

Additional Limited Scope Guidance

In addition to the Limited Scope guidance listed above, the CPD website contains the following Limited Scope Project approach guidance documents:

- Limited Scope Concept Development Phase Network Diagram
- Limited Scope Concept Development Phase WBS
- Limited Scope Concept Development Scope Statement Template
- Limited Scope Concept Development Bridge Checklist
- Limited Scope Concept Development Pavement Checklist
- Limited Scope Concept Development Report Bridge Example
- Limited Scope Concept Development Report Bridge Template
- Limited Scope Concept Development Report Pavement Example
- Limited Scope Concept Development Report Pavement Template
- Limited Scope Final Design Phase Network Diagram
- Limited Scope Final Design Phase WBS
- Limited Scope Final Design Scope Statement Template

Limited Scope guidance can also be found within the following CPD documents:

- Concept Development Phase Activity Descriptions
- Preliminary Engineering Phase Activity Descriptions
- Final Design Phase Activity Descriptions
- Concept Development WBS Dictionary
- Preliminary Engineering WBS Dictionary

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• Final Design WBS Dictionary

Note:

- 1. The Limited Scope CD and FD Network Diagrams and WBS Diagrams are specifically designed for the delivery of pavement resurfacing "mill 'x', pave 'x' plus one" and bridge deck/superstructure replacement project types. Other approved Limited Scope project types may utilize these diagrams as a basis for developing a project-specific scope and schedule.
- 2. The work associated with ADA compliance with ROW impacts is not included in the following limited scope guidance documents: activity descriptions, network diagrams, WBS, etc. If applicable, this work needs to be added to a project specific scope of work, network diagram and schedule.

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